Technical Data Sheet

TGE Agar (Tryptone Glucose Meat Extract Agar)

Ordering number: 1.10128.0500

For determining the total aerobic microbial count in water and other materials.

This culture medium complies with the specifications given by the APHA for the examination of water (1998) and for food (1992) and the recommendations of the "American Petroleum Institute" (1959). For details concerning the examination of foodstuffs also see BAUMGARTEN and LEVETZOW (1969).

Mode of Action

TGE agar medium is recommended for the total aerobic plate count of water and dairy samples. It can also be used for the detection of thermophilic bacteria in dairy products. It is also recommended for determination of the heterotrophic plate count in bottled water (KIM and FENG, 2001).

Typical Composition (g/L)

TGE Agar (Tryptone Glucose Meat Extract Agar)	
Peptone from casein	5.0
Meat extract*	3.0
D(+)glucose	1.0
Agar-agar**	12.0

* Meat extract is equivalent to the term beef extract.
**Agar-agar is equivalent to other different terms of agar.

Preparation

Suspend 21 g/litre, autoclave (15 min at 121°C).

pH: 7.0 ± 0.2 at 25°C.

The plates are clear and yellowish-brown.

Experimental Procedure and Evaluation

The culture medium is usually inoculated by the pour-plate method. Other details depend on the purpose for which the medium is used.

Incubation: 24 hours at 35°C aerobically.

Storage

Store at +15 °C to +25 °C, dry and tightly closed. Do not use clumped or discolored medium. Protect from UV light (including sun light). For *in vitro* use only.

Quality Control

Control strains	Recovery on test medium, 24 h, 35°C, aerobic
Staphylococcus aureus ATCC 25923 (WDCM 00034)	≥ 70 %
Streptococcus agalactiae ATCC 13813	≥ 70 %
Enterococcus faecalis ATCC 11700	≥ 70 %
Escherichia coli ATCC 25922 (WDCM 00013)	≥ 70 %
Salmonella typhimurium ATCC 14028 (WDCM 00031)	≥ 70 %
Pseudomonas aeruginosa ATCC27853 (WDCM 00025)	≥ 70 %
Bacillus cereus ATCC 11778 (WDCM 00001)	≥ 70 %

Please refer to the actual batch related Certificate of Analysis.

A recovery rate of 70 % is equivalent to a productivity value of 0.7.

Escherichia coli ATCC 25922

Literature

American Public Health Association, American Water Works Association and Water Pollution Control Federation: Standard Methods for the Examination of Water and Wastewater, 20th ed., Washington, 1998.

American Public Health Association: Compendium of methods for the microbiological examination of foods. – 3rd ed. (1992).

Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th ed., APHA Inc., Washington, D.C.

BAUMGARTEN, H.J., u. LEVETZOW, R.: Untersuchungen zu hygienischen Beschaffenheit von im Handel befindlicher Speisegelatine. - **Arch. f. Lebensmittelhyg., 20;** 38-42 (1969).

Recommended Practice for Biological Analyses of Subsurface Injection Waters. Vol. 38, 1st ed., American Petroleum Institute (1959).

Kim and Feng. 2001. *In* Downes and Ito (ed.), Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.

Ordering Information

Product	Cat. No.	Pack size
TGE Agar (Tryptone Glucose Extract Agar)	1.10128 .0500	500 g

Merck KGaA, 64271 Darmstadt, Germany
Fax: +49 (0) 61 51 / 72-60 80
mibio@merckgroup.com
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices
For Technical Service, please visit:
www.merckmillipore.com/techservice